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Is There a Tradeoff between Outreach and Sustainability of Micro finance institutions? Evidence from Indian Microfinance Institutions (MFIs)

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Abstract

There has been an argument in literature that the more Micro finance institutions (MFIs) aim for financial sustainability the less will be the impact on poverty reduction and hence, there is a tradeoff between outreach to the poor and financial sustainability. As part of empirical evidence on the ongoing debate, the paper has tried to examine a tradeoff between outreach to the poor and financial sustainability based on the recent (2009) data on 85 Indian MFIs using correlation matrix. In this regard, the finding of this study does not support a tradeoff between outreach and financial sustainability more specifically the simple correlation between average loan size (proxy to depth of outreach) and operational sustainability is found to be weak. Furthermore, the correlation between number of women borrowers (alternative proxy to outreach) and operational sustainability is also very weak. However, the study revealed that there is a strong positive correlation between the number of active borrowers (breadth of outreach) and operational sustainability.

Key Words: Outreach, Sustainability, Tradeoff, Correlation, Indian MFIs.

Introduction

Financial services available to poor people in developing countries are very limited. Robinson (2001) estimates that 80% of the world's populations living in developing countries do not have access to formal financial services. In developing countries, including India (where an estimated from 350-400 million people believed to be under served), micro finance institutions (MFIs) emerged with unique opportunity to poor people who do not have access to Commercial Banks. According to Consultative Group to Assist the Poorest CGAP (2004) microfinance is regarded as "a powerful tool to fight poverty'' that can help poor people to raise income, build their assets, and cushion themselves against external shocks. However, it should be underlined that micro finance is not a panacea to poverty.

Microfinance Institutions (MFIs) are relatively small financial institutions that have traditionally provided small loans (microcredit) to low income citizens with the objective of helping them to engage in productive activities or microenterprises (Hassen 2009). They give poor people particularly women and small businesses access to financial services. MFIs differ from traditional financial institutions in the sense that they provide services to low income customers and often provide loans without the conventional form of collateral. They also provide skill-based training to enhance productivity and organizational support, and consciousness-building training to empower the poor. The financial services of such institutions target the poor through innovative approaches which include group lending, progressive lending, regular repayment schedules, and collateral substitutes.

Microfinance institutions predominantly originated with a mission of social objective which is "poverty reduction". However, in the last two decades or more there has been a major shift in emphasis from the

social objective of poverty alleviation towards the economic objective of sustainable and market based financial services. More specifically, MFIs are expected not only to reach the poor but also to become financial viable. Indeed, MFI have been increasingly pressured to adapt more "business" practices and to become more self-sufficient (Ledgerwood 1999; Christen 1998; Mordich 2000). The shift in emphasis of MFIs into viable financial institutions while maintaining greater outreach to the poor has give rise to a debate over trade- off between outreach to the poor and financial sustainability.

Microfinance at present is marked by a debate between two approaches namely the financial systems approach and the poverty lending approach. Both approaches share the common goal to provide credit and savings products to the poor in a sustainable way the difference lies on approach. The financial systems approach contends that commercial profitability is necessary so that MFIs can generate the funding they need from capital markets to expand the coverage of financial services to the poor. The poverty lending approach emphasizes making subsidized credit available to the poorest of the poor (Robinson 2001). The advocates of the poverty reduction approach would argue that the poor cannot afford higher interest rates; hence that financial sustainability ultimately goes against the aim of serving large groups of poor borrowers. Meanwhile, financial systems claims that empirical evidence neither shows that the poor cannot afford higher interest rates nor that there is a negative correlation between the financial sustainability of the institution and the poverty level of the clients(ibid). Literature stressed that MFIs need to be financial sustainable so as to make a substantial contribution to poverty reduction.

Majority of MFIs have a dual mission: a social mission - to provide financial services to large numbers of low-income persons to improve their welfare, and a commercial mission -to provide those financial services in a financially viable manner. Micro finances at present are confronted with the challenges of meeting the dual objectives of reaching poor clients (i.e social objective) and being profitable (i.e financial objective) (Mordich 2000; Haratkha 2004). The social objective seeks to provide financial services to as many of the lowest income population as possible; the financial objective drives the organization to achieve financial self-sufficiency, which permits sustained service delivery without dependence on subsidies. Simanowitz and Walter (2002) argue that microfinance is a compromise between this social mission and commercial mission. Some argue that the two objectives are inherently dichotomous as they justify that delivering financial services to the poor is costly, difficult, and risky and as such there may be a shift in focus from the very poor to the less poor. More specifically, there is a suspect of occurrence of mission drift whereby profitable MFIs provide relatively larger size loans to relatively wealthier microfinance clients. However, the prevalence of tradeoff between in depth outreach and financial sustainability is not supported by cases and empirical evidences. In line to this, therefore, the objective of this paper is to examine a tradeoff between outreach and sustainability and thereby to contribute to the ongoing debate on whether outreach and sustainability are substitutes or complements by focusing on Indian MFIs as a case.

The remainder of the paper is organized as follows. In section two, the paper tried to present a brief review of related literature. Section 3 provides the measurements of outreach and sustainability and data set. Section 4 presents results and discussions and ends up with conclusions.

Review of Related Literature

Though there is an ongoing debate between the two views of MFIs: the financial systems approach and the poverty lending approach, surprisingly enough, limited empirical evidences are found in literature. This could be due to insufficiency of data sets to draw meaningful inferences about such relationships. However, in this instance it is worth mentioning the paper by Cull *et al*. (2007) who studied the financial performance and outreach with focus on a lending methodology based on a survey of 124 micro finances institutions in 49 countries. They attempt to examine whether more profitability is associated with a lower depth of outreach to the poor. Their study suggests that MFIs that focus on providing loans to individuals perform better in terms of profitability. Yet, the fraction of poor borrowers and female borrowers in the loan portfolio of these MFIs is lower than for MFIs that focus on lending to groups. The study also suggests that

individual-based microfinance institutions, especially if they grow larger, focus increasingly on wealthier clients, whereas this is less so for the group-based microfinance institutions. The study identified no evidence of trade off between being profitable and reaching the poor. Most importantly, the study strongly underlines the importance of institutional design in considering trade-offs in microfinance

Olivares-Polanco(2005) investigates the determinants of outreach in terms of the loan size of MFIs, using data for 28 MFIs in Latin America for the years 1999-2001. Using ordinary least square, and found that there exist a trade-off between sustainability and outreach. Makame and Murinde (2006) analyze the outreach versus sustainability trade-off using a balanced panel dataset for 33 MFIs in five East African countries for the period 2000-2005, using different measures of the depth (loan size) and breadth (number of borrowers) of outreach, they find strong evidence for a trade-off between outreach and sustainability and efficiency. Lensienk et al (2008) examine a trade-off between outreach to the poor and efficiency of microfinance institutions using stochastic frontier analysis (SFA) from a sample of more than 1300 observations, found that outreach and efficiency of MFIs are negatively correlated and indicate that efficiency of MFIs is higher if they focus less on the poor and/or reduce the percentage of female borrowers.

Serving the very poor and attaining sustainability is a challenge to the microfinance industry. There is a common assumption in microfinance operations that tradeoffs exist between outreach and sustainability. It would seem evident that there are some circumstances in which the two objectives would conflict (Gonzalez and Rosenberg 2005). In the first place, there are some potential borrowers who are extremely poor, have no reliable source of income from which a loan could be repaid, and lack the opportunity (not just the capital) to start a micro business. Clearly it cannot be profitable to lend to people who are unlikely to repay. Secondly, some very poor people live in remote and sparsely populated areas where administrative costs of lending are extremely high, and where interest rates would have to be correspondingly high to cover those costs (ibid).

However, it is not possible to conclude precisely on outreach and sustainability as mutually exclusive goals. It is difficult to presume that deeper outreach is a constraint to sustainability and vice versa (Paxton and Fruman 1997). Financial sustainability is vital to serve clients permanently and "the only way to make an impact far beyond what donor agencies and most governments can fund" but is not an end in itself (Helms 2006). Some argue that (Christen *et al*. 1995; Otero and Rhyne 1994; Rhyane 1998; Christen and Drake 2000; Woller 2000; Mersland and Strom 2009) increasing outreach and sustainability are complementary objectives because larger numbers of clients help MFIs achieve economies of scale and reduce costs. On the other hand, Hulme and Mosley 1996; Conning 1999; Paxton, Graham and Thraen 2000; Zeller 2003) however, argue that there is a trade-off between serving the poorest segments and being financially viable, since transaction costs associated with smaller loans are high when compared to those associated with larger loans. Further this trade-off arises because MFI transaction costs are high for obtaining information needed to determine the creditworthiness of poor clients (Navajas *et al*. 2000). According to the IMF (2005) the MFIs that have become self-sustainable tend to be larger and more efficient. They also tend not to target the very poor, as targeting the less poor leads to increases in loan size and improved efficiency indicators, whereas MFIs focusing on the poorest tend to remain dependent on donor funds (ibid). MFIs, of course, can still be sustainable while serving the poor if they charge high enough interest rates or achieve high levels of efficiency (Woller 2000).

Outreach and Financial Sustainability

Outreach

Outreach is defined as the ability of an MFI to provide high quality financial services to a large number of clients (Lariviere and Martin 1999). Outreach is "a social benefit of microfinance" aiming at improving the well being of the poor (Schreiner, 2002). Outreach has two components; depth and breadth

Depth of outreach is the value that society attached to the net gain of a given client (Schreiner 2002). The loan size is usually taken as a proxy for the depth of outreach (Bhatt and Tang 2001; Cull *et al*. 2007; Schreiner 2002; Lensink 2008). The assumption is that the smaller the loan size, the deeper the outreach, or the poorer the client the smaller the amounts or shorter times, indicate better depth. Accordingly, it is believed that poorest clients are served if the majorities are female and the average loan size is smaller (Bhatt and Tang 2001). An alternative proxy to the depth of outreach of microfinance is the percentage of women borrowers. The SPTF (2009) report showed that women outreach is considered an important indicator in the various social performance measurement and assessment tools used.

Breadth of outreach simply involves the number of poor people reached by an MFI and is measured as the total number of active borrowers. It can also be assessed in relation to the increase in branch network and staff hired over time.

Financial Sustainability

Financial sustainability stands for the degree that an institution is capable of generating sufficient revenue from offered services to meet full operating costs. According to Foster *et al.* (2003) there are two levels of financial sustainability: Operational self sustainability and financial self-sustainability. The first level of financial sustainability is achieved when "the organization earns sufficient income from its own earned revenue sources to cover all administrative or operational expenses but relies on wholly or partially subsidized capital base" (Forster *et al*. 2003). A commonly used indicator is the operational sufficiency index.

Operational self-sufficiency = total operating income/total operating expenses (including administrative expenses, interest expenses, and loan loss provision)

The second level of financial sustainability is achieved when the organization not only earns sufficient income to cover all its operational expenses but is also covers the cost of inflation, its loan losses and the market cost of funds. In other words, at this level of sustainability, an organization earns positive net income independently of donor support and can offer positive returns to its investors (Forster *et al.* 2003). A commonly used indicator, accounting for institutional scale, is the adjusted return on assets

Adjusted return on assets (equities) = net operating income, adjusted and net of taxes, inflation and subsidies/ average total assets.

Sustainability is also measured by return on assets (ROA) and Return on equity. The return on assets (ROA) ratio indicates how well a MFI is using the institution's total assets to generate returns. Studies such as Olivares-Polanco (2004) and Cull *et al.* (2007) among other have used return on assets in measuring sustainability or profitability.

Data

The data is obtained from the MIX MARKET, which is the most renowned and global web-based microfinance information platform. The database yields information on micro finances institutions around the globe and provides information to sector actors and the public at large on microfinance institutions (MFIs) worldwide, public and private funds that invest in microfinance, MFI networks, raters/external evaluators, advisory firms, and governmental and regulatory agencies In the data base there are 88 Indian

MFIs which have statement report in the study year however due data incomplete 3MFIs are excluded and thus the study is based on 85 MFIs.

Findings and Conclusions

Of the sample Indian MFIs the descriptive result showed that as depicted in table(1) the average loan balance per borrower is about 175 dollar with the minimum and maximum ranges from 9 and 1778 dollar, respectively. Further, the data revealed that that the majority of the clients of these MFIs bout 93 percent are women and indicates that Indian MFIs have good depth of outreach. Of the institutions' the breadth of outreach is very encouraging as the average number of active borrower is 319704 which ranges from 1284 to maximum 5795028. It is interesting to know that about 82% MFIs they have already reached operational sustainability however, it should be noted that operational sustainability is less rigorous measures of sustainability.

There has been argument in literature that the more MFIs aim for financial sustainability the less will be the impact on poverty reduction and hence there is a tradeoff between outreach to the poor and financial sustainability. On the other hand however, others still argue that outreach to the poor and being financial sustainable are complementary rather in the sense that these larger numbers of clients enable MFIs to boost economies of scale and reduce costs. In this regard our findings does not support the tradeoff between outreach and financial sustainability more specifically, the correlation between average loan size (proxy to outreach) and operational sustainability is weak as shown in table (2). Furthermore, the correlation between number of women borrowers (alternative proxy to breadth of outreach) and operational sustainability is also very weak. However the study revealed that there is a strong positive correlation between the number of active borrowers and operational sustainability. As it can be observed from table (2), simple correlation between average loan size and number of women borrowers has shown strong negative correlation which may indicate that women are borrowing small loans. Therefore, it can be concluded that the overall result of the study do not find a tradeoff between outreach the poor and operational sustainability.

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Appendices

Table 1 Descriptive Statistics Of Outreach And Sustainability Variables

	N	Minimum	Maximum	Mean	Std. Deviation
Average loan balance per borrower	85	9	1778	175.93	194.278
Number of active borrowers	85	1284	5795028	319709.51	832381.656
Return on assets	85	-.6068	.0941	.002992	.0997454
Return on equity	85	-1.9016	1.4703	.115264	.4352440
OSS	85	-.6836	1.8262	1.128876	.3734535
Percentage of women borrowers	85	.2206	1.0000	.932819	.1608382

Table 2 Correlations between outreach and sustainability

		Average loan balance per borrower	Number of active borrowers	Per women borrowers	Return on assets	Return on equity	OSS
Average loan balance per borrower	Pearson Correlation	1	-.014	-.502**	.051	.045	.107
	Sig. (2-tailed)		.902	.000	.645	.686	.336
	N	85	85	85	85	85	85
Number of active borrowers	Pearson Correlation	-.014	1	.029	.160	.175	.299**
	Sig. (2-tailed)	.902		.798	.148	.114	.006
	N	85	85	85	85	85	85
Per women borrowers	Pearson Correlation	-.502**	.029	1	-.044	.185	-.041
	Sig. (2-tailed)	.000	.798		.693	.093	.715
	N	85	85	85	85	85	85
Return on assets	Pearson Correlation	.051	.160	-.044	1	.593**	.830**
	Sig. (2-tailed)	.645	.148	.693		.000	.000
	N	85	85	85	85	85	85
Return on equity	Pearson Correlation	.045	.175	.185	.593**	1	.627**
	Sig. (2-tailed)	.686	.114	.093	.000		.000
	N	85	85	85	85	85	85
OSS	Pearson Correlation	.107	.299**	-.041	.830**	.627**	1
	Sig. (2-tailed)	.336	.006	.715	.000	.000	
	N	85	85	85	85	85	85

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	Sig. (2-tailed)	.686	.114	.093	.000		.000
	N	85	85	85	85	85	85
OSS	Pearson Correlation	.107	.299**	-.041	.830**	.627**	1
	Sig. (2-tailed)	.336	.006	.715	.000	.000	
	N	85	85	85	85	85	85

**. Correlation is significant at the 0.01 level (2-tailed).